

EXPRESS MAIL CERTIFICATE

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HIGH DEFINITION TRANSDUCER

BACKGROUND OF THE INVENTION

15 The present invention relates knowledge of membrane transducers does not impart distinction to all aspects of musical quality. The speed of movement is too slow, due to the inertia of the coil membrane mass.

20 As sound is the result of collisions of particles in the structure of the material, it is more appropriate to operate directly on air particles without using collisions via a membrane, especially for the upper part of the sound spectrum. This present procedure uses the earth's natural reference constant electromagnetic field, or a neighboring electromagnetic field, for example a magnet of medium strength. This imposed constant electromagnetic field orients the particles in space, either naturally or artificially. In this field, we superimpose at least one electromagnetic field which is variable according to the rhythm of an audio modulation. The particles pre-oriented by the reference constant electromagnetic field, undergo de-  
25 polarizations by the variable rotating electromagnetic field, and this procedure forces the air particles to agitate in the different orientations of the variable electromagnetic fields, which creates sounds due to the collision of particles induced to move. The present procedure indicates that with each variable electromagnetic field there is an association of a type of particle de-polarization: if there are several electromagnetic fields, there are several types of  
30 de-polarization. This procedure is a fixed motor with a rotating field used to activate the air

de-polarization. This procedure is a fixed motor with a rotating field used to activate the air particles, a basic embodiment consists of at least one primary, solenoid coil, wound for example on a circle or rod, linked to an electric audio signal, a small magnet placed in the rod can act as a reference electromagnetic field. The device on each primary coil can receive at  
 5 least one secondary coil wound on the primary coil, which forms an electro-acoustic transformer through the addition of induced electromagnetic fields.

The device can be mounted in any portion of the audio electric circuit on an electro-acoustic speaker or the power circuit of an acoustic speaker.

The device can be linked and mounted electrically in series or in parallel, with  
 10 impedance needing to be adapted by a person skilled in the art in order to achieve the desired effect. The device needs to be active within the listening space, in communication with the ambient air, without being isolated by a sealed product isolating it from the ambient space.

#### **BRIEF DESCRIPTION OF THE DRAWING FIGURES**

15 Figure 1 illustrates an embodiment of an electrostatic transducer in accordance with the present invention.

#### **DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT**

With reference to the attached drawing Fig. 1, an electrostatic transducer with a fixed  
 20 motor and a variable field, made up of two primary coils (2, 3) mounted in parallel with four and two ohms on two rods (4, 5) of different diameters linked together. The small diameter receives a small magnet (6) two centimeters long and a section of one centimeter on the side. The magnet can slide into an elastic groove (7) and can be set at the optimum setting for acoustic performance, with the density of the reference electromagnetic field thus being  
 25 perfectly adjusted. This high definition electro-acoustic transducer is serial mounted in series (1) on the negative pole power cable of an acoustic speaker, a non-imitative example of the present procedure created by a person skilled in the art. Sound reproduction is complete in all sound and speed expressions.

Parallel mounting with an appropriate impedance of for example eight or ten ohms and

another device serial mounted like the one presented here, provide excellent finesse and reproduction.

- The use of this acoustic transducer means that it is possible to suppress acoustic filter components either partially or totally, as the fixed motor is also a transformer by virtue of also
- 5 being a self-induction coil, with effective sound performance. The device and procedure are an acoustic complement to sound reproduction in all audio and audio-visual fields.

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